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TRIPLED FIXED POINTS IN COMPLETE E-CONE METRIC SPACES

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Abstract: In this paper, we investigate the tripled fixed point results at in the context of complete $E-$cone metric spaces. We extend existing fixed point theorems by establishing conditions under which a mapping possesses a unique tripled fixed point. Utilizing novel contractive conditions, we develop new criteria that guarantee the existence and uniqueness of such fixed points. These results broaden the scope of fixed-point theory and offer new tools for addressing problems in applied mathematics, particularly in the areas of nonlinear analysis, dynamic systems, and optimization. Our results help us learn more about fixed points in more general structures. This makes it possible for more research to be done in generalized metric spaces and how they can be used to solve differential equations, integral equations, and boundary value problems.

Keywords and Phrases: Tripled fixed points, $E-$cone metric spaces, Contractive conditions.

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